

**\*09673707\***

1600

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PATENT APPLICATION: US/09/673,707DATE: 01/02/2003  
TIME: 08:57:34Input Set : A:\Nih356-1.app  
Output Set: N:\CRF4\01022003\I673707.raw**RECEIVED**

3 <110> APPLICANT: Pastan, Ira H.  
4 Bera, Tapan K.  
5 Kennedy, Paul E.  
6 Berger, Edward A.  
7 Barbas III, Carlos F.  
8 The Government of the United States of America  
9 as represented by The Secretary of the  
10 Department of Health and Human Services  
12 <120> TITLE OF INVENTION: Recombinant Immunotoxin Directed Against the HIV-1  
gp120 Envelope Glycoprotein  
15 <130> FILE REFERENCE: 015280-356100US  
17 <140> CURRENT APPLICATION NUMBER: US 09/673,707  
18 <141> CURRENT FILING DATE: 2001-01-11  
20 <150> PRIOR APPLICATION NUMBER: WO PCT/US99/12909  
21 <151> PRIOR FILING DATE: 1999-06-08  
23 <150> PRIOR APPLICATION NUMBER: US 60/088,860  
24 <151> PRIOR FILING DATE: 1998-06-11  
26 <160> NUMBER OF SEQ ID NOS: 13  
28 <170> SOFTWARE: PatentIn Ver. 2.0  
30 <210> SEQ ID NO: 1  
31 <211> LENGTH: 251  
32 <212> TYPE: PRT  
33 <213> ORGANISM: Artificial Sequence  
35 <220> FEATURE:  
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41 1 5 10 15  
43 Ala Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Arg Phe Ser Asn  
44 20 25 30  
46 Phe Thr Val His Trp Val Arg Gln Ala Pro Gly Gln Arg Phe Glu Trp  
47 35 40 45  
49 Met Gly Trp Ile Asn Pro Tyr Asn Gly Asn Lys Glu Phe Ser Ala Lys  
50 50 55 60  
52 Phe Gln Asp Arg Val Thr Phe Thr Ala Asp Thr Ser Ala Asn Thr Ala  
53 65 70 75 80  
55 Tyr Met Glu Leu Arg Ser Leu Arg Ser Ala Asp Thr Ala Val Tyr Tyr  
56 85 90 95  
58 Cys Ala Arg Val Gly Glu Trp Gly Trp Asp Asp Ser Pro Gln Asp Asn  
59 100 105 110  
61 Tyr Tyr Met Asp Val Trp Gly Lys Gly Thr Thr Val Ile Val Ser Ser  
62 115 120 125

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64 Gly Gly Gly Ser Gly Gly Ser Gly Gly Ser Gly Gly Ser Asp
65      130           135           140
67 Ile Glu Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu
68 145           150           155           160
70 Arg Ala Thr Phe Ser Cys Arg Ser Ser His Ser Ile Arg Ser Arg Arg
71           165           170           175
73 Val Ala Trp Tyr Gln His Lys Pro Gly Gln Ala Pro Arg Leu Val Ile
74           180           185           190
76 His Gly Val Ser Asn Arg Ala Ser Gly Ile Ser Asp Arg Phe Ser Gly
77           195           200           205
79 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Thr Arg Val Glu Pro
80           210           215           220
82 Glu Asp Phe Ala Leu Tyr Cys Gln Val Tyr Gly Ala Ser Ser Tyr
83 225           230           235           240
85 Thr Phe Gly Gln Gly Thr Lys Leu Glu Arg Lys
86           245           250
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90 <211> LENGTH: 753
91 <212> TYPE: DNA
92 <213> ORGANISM: Artificial Sequence
94 <220> FEATURE:
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96     Sequence: 3B3V-H(Gly-4Ser)-3V-L nucleotide sequence
98 <220> FEATURE:
99 <221> NAME/KEY: CDS
100 <222> LOCATION: (1)..(753)
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105 gccccccggac agagggttga gtggatggga tggatcaatc cttacaacgg aaacaaaagaa 180
106 ttttcagcga agttccagga cagagtacc tttaccgcgg acacatccgc gaacacagcc 240
107 tacatggagt tgaggagcct cagatctgca gacacggctg tttattattg tgcgagagtg 300
108 ggggagtgccc gttggatga ttctcccccag gacaattatt atatggacgt ctggggcaaa 360
109 gggaccacgg tcatacgatc ctcaggccga ggcggatcag gtggtggcgg atctggaggt 420
110 ggccgaaagcg acatcgagct cacgcagct ccaggcaccc tgtctctgtc tccaggggaa 480
111 agagccacct tctccctgtgg gtccagtcac agcattcgca gccgcccgt agcctggcac 540
112 cagcacaaac ctggccaggg tccaaggctg gtcatacatg gtgtttccaa tagggcctct 600
113 ggcatacgatc acagggttcag cggcagtggg tctgggacag acttcactct caccatcacc 660
114 agagtggagc ctgaagactt tgcactgtac tactgtcagg tctatggtgc ctcctcgatc 720
115 actttggcc aggggaccaa actggagagg aaa                         753
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122 <220> FEATURE:
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125 <400> SEQUENCE: 3
126 Gly Gly Gly Ser Gly Gly Ser Gly Gly Gly Ser
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137 peptide  
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141 1 5  
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147 <213> ORGANISM: Artificial Sequence  
149 <220> FEATURE:  
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152 <400> SEQUENCE: 5  
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154 gtgaaggttt cttgtcaggc t 81  
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166 gccccagacg tc 72  
168 <210> SEQ ID NO: 7  
169 <211> LENGTH: 78  
170 <212> TYPE: DNA  
171 <213> ORGANISM: Artificial Sequence  
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192 <211> LENGTH: 4  
193 <212> TYPE: PRT  
194 <213> ORGANISM: Artificial Sequence

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Input Set : A:\Nih356-1.app  
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199 endoplasmic retention sequence  
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203 1  
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208 <212> TYPE: PRT  
209 <213> ORGANISM: Artificial Sequence  
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212 <223> OTHER INFORMATION: Description of Artificial Sequence:carboxy  
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214 endoplasmic retention sequence  
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217 Arg Glu Asp Leu  
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224 <213> ORGANISM: Artificial Sequence  
226 <220> FEATURE:  
227 <223> OTHER INFORMATION: Description of Artificial Sequence:native carboxy  
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229 endoplasmic retention sequence  
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232 Arg Glu Asp Leu Lys  
233 1 5  
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237 <211> LENGTH: 5  
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239 <213> ORGANISM: Artificial Sequence  
241 <220> FEATURE:  
242 <223> OTHER INFORMATION: Description of Artificial Sequence:linking peptide  
244 <400> SEQUENCE: 12  
245 Gly Gly Gly Ser  
246 1 5  
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250 <211> LENGTH: 4  
251 <212> TYPE: PRT  
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255 <223> OTHER INFORMATION: Description of Artificial Sequence:carboxy  
256 terminal sequence of Pseudomonas exotoxin (PE)  
257 endoplasmic retention sequence  
259 <400> SEQUENCE: 13  
260 Arg Asp Glu Leu  
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**VERIFICATION SUMMARY**

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